

**REMARKS**

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-15 and 23-26 are now present in this application. Claims 1, 8, 10, 12 and 23 are independent. By this Amendment, claims 16-22 are canceled, claims 1, 2, 8, 10, 12, 15 and 23 are amended, and claims 24-26 are added. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

**Drawings**

Applicants thank the Examiner for acknowledging that the drawings filed on April 25, 2006 are accepted.

**Restriction Requirement**

The Examiner has made the Restriction Requirement final, and has withdrawn claims 16-18 from further consideration. Applicants have therefore canceled claims 16-18.

**Entry of Amendments**

Applicants respectfully submit that this Amendment should be entered as a matter of right because the Examiner failed to treat claim 23 on its merits, added as a matter of right under 37 CFR §1.111 in the Amendment filed on April 25, 2006, and therefore prosecution should be reopened, thereby withdrawing the outstanding Office Action, including withdrawing its finality, and claim 23 should be examined on its merits.

**Rejection Under 35 U.S.C. § 102**

Claims 1-12 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,225,109 to Yotsutsuji et al. ("Yotsutsuji"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the Examiner, inherency may not be established by probabilities or possibilities. What is inherent, must necessarily be disclosed. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

A claim limitation is inherent in the prior art if it is necessarily present in the prior art, not merely probably or possibly present. Rosco v. Mirro Lite, 304 F.3d 1373, 1380, 64 USPQ2d 1676 (Fed. Cir. 2002). The dispositive question regarding anticipation is whether one skilled in the art would reasonably understand or infer from the prior reference's teaching that every claim feature or limitation was disclosed in that single reference, Dayco Products, Inc. v. Total Containment, Inc., 329 F.3d 1358, 1368, 66 USPQ2d 1801 (Fed. Cir. 2003).

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir.

1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788(Fed. Cir. 1984).

If the PTO fails to meet this burden, then the applicant is entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability.

Claims 1, 8, 10 and 12, as amended, positively recite a combination of features including a flow accelerating material means provided on the inner walls of both the fixed mold and the movable mold that form the molding space for increasing insulation of the fluid and reducing a flow resistance between the inner walls and the fluid so as to accelerate the flow of the fluid injected into the injection mold. That is, by the claimed invention as recited in claims 1, 8, 10 and 12, the flow accelerating means increases insulation of the fluid as well as reduces a flow resistance between the inner walls and the fluid so as to accelerate flow of the fluid. Yotsutsuji does not disclose this claimed combination of features.

In this regard, Yotsutsuji's metal layer 12 is heated immediately by the molten resin when molten resin is charged into the cavity 2 and Yotsutsuji's heat insulating layer 12, provided on the metal layer 12, prevents release of the heat from the metal layer so as to improve the transfer of the molten resin. However, Yotsutsuji's metal layer 12 is not disclosed by Yotsutsuji to reduce a flow resistance between the molding surface 11 and the molten resin, as claimed.

In this regard, Applicants note that not only is there no explicit disclosure of this claimed feature, but the Office Action fails to present objective factual evidence that Yotsutsuji discloses such a feature inherently ( i.e., not just possibly, and not just probably, but necessarily).

Accordingly, the Office Action fails to make out a *prima facie* case of anticipation of the subject matter recited in independent claims 1, 8, 10 and 12. Dependent claims 2-7, 9, 11 and 15 are not anticipated by Yotsutsuji at least for the above reasons.

Accordingly, reconsideration and withdrawal of this rejection of claims 1-12 and 15 under 35 USC §102(b) as being anticipated by Yotsutsuji are respectfully requested.

Claims 1-3, 5 and 12-15 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent 4,201,742 to Hendry et al. ("Hendry"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Independent claims 1 and 12, as amended, recite a combination of features including a flow accelerating material means provided on the inner walls of both the fixed mold and the movable mold that form the molding space for increasing insulation of the fluid and reducing a flow resistance between the inner walls and the fluid so as to accelerate flow of the fluid injected into the injection mold. That is, by the claimed invention as recited in claims 1, 8, 10 and 12, the flow accelerating means increases insulation of the fluid as well as reduces a flow resistance between the inner walls and the fluid so as to accelerate flow of the fluid. Hendry does not disclose this claimed combination of features.

For example, Hendry's thin layer of Teflon acts as a thermo-barrier so that the heat of the plastic is retained at the surface of the mold until the desired finish on the molded part is

obtained. However, Hendry does not disclose that its thin layer of Teflon reduces a flow resistance between the mold surface 11 and the molten resin, as claimed.

In this regard, Applicants note that not only is there no explicit disclosure of this claimed feature, but the Office Action fails to present objective factual evidence that Hendry discloses such a feature inherently ( i.e., not just possibly, and not just probably, but necessarily).

Accordingly, the Office Action fails to make out a *prima facie* case of anticipation of the subject matter recited in independent claims 1, 8, 10 and 12. Dependent claims 2, 3, 5 and 13-15 are not anticipated by Hendry at least for the above reasons, and for their added features..

Accordingly, reconsideration and withdrawal of this rejection of claims 1-3, 5 and 12-15 under 35 USC §102(b) as being anticipated by Hendry are respectfully requested.

### **Claim 23**

Applicants respectfully submit that claim 23 should be examined on the merits for reasons stated above.

### **New Claims 24-26**

Dependent claims 24-26 have been added. These claims are fully supported by applicants' originally filed disclosure. Claims 24-26 recite a combination of features including that the solid coating material is at least one of either PE (Polyethylene) and a methacrylate (claim 24); zirconium oxide (claim 25); or one of PEEK (Poly Ether Ether Ketone), PE (Polyethylene) and a methacrylate (claim 26).

None of the applied art discloses or suggests this claimed combination of features. Accordingly, Applicants respectfully submit that claims 24-26 patentably define over the applied art.

**Information Disclosure Statement**

Applicants are filing an Information Disclosure Statement (IDS) on even date herewith and respectfully request that the Examiner consider the references cited therein and provide Applicants with an initialed copy of the Form PTO/SP/08 filed with the IDS.

**Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, prosecution should be reopened, and that claims 16-18, as well as claims 1, 8, 10 and 12-15, should be allowed.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Application No.: 10/772,315  
Art Unit 1722

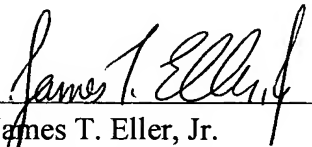
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Applicants respectfully petition under the provisions of 37 C.F.R. § 1.136(a) and § 1.17 for a one-month extension of time in which to respond to the Examiner's Office Action. The Extension of Time Fee in the amount of \$120.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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